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07/24/03  
24544.01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kevin J. Knight  
Serial No.: 10/054,164  
Filed: January 22, 2002  
Art Unit: 2141  
Patent Examiner: Kenneth R. Coulter  
Title: **METHOD AND APPARATUS FOR SELECTING, MODIFYING  
AND SUPERIMPOSING ONE IMAGE ON ANOTHER**

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July 2, 2003

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Applicant submits herewith copies of documents known to applicant and his counsel which he believes may be material to the examination of this application and in respect of which there may be a duty to disclose in compliance with the requirements of 37 C.F.R. §1.56.

1. The subject application is a continuation of US Patent Application Serial No. 09/479,284, which was filed on January 6, 2000 and was issued on February 5, 2002 as US Patent No. 6,344,853. The following references were cited with respect to this patent:

- a. Parkyn, 4,675,725, 06-1987
- b. Hattori et al., 4,706,075, 11-1987

- c.     Blancato, 4,731,743, 03-1988
- d.     Chang, 4,868,552, 09-1989
- e.     Kinoshita et al., 5,109,272, 04-1992
- f.     Yamaguchi, 5,130,801, 07-1992
- g.     Bartlett, 5,283,560, 02-1994
- h.     Kagawa, 5,357,601, 10-1994
- i.     Homma et al., 5,383,111, 01-1995
- j.     Fellous, 5,479,597, 12-1995
- k.     Jarrige et al., 5,490,080, 02-1996
- l.     Choi, 5,598,224, 01-1997
- m.     Sekine et al, 5,614,945, 03-1997
- n.     Korszun, 5,680,528, 10-1997
- o.     Hassan et al., 5,689,562, 11-1997
- p.     Nakatani et al., 5,805,237, 09-1998
- q.     Hill, 5,970,471, 10-1999
- r.     Fantone et al., 6,026,215, 02-2000
- s.     EP 0414222, 04-1996
- t.     EP 0677954, 10-1995
- u.     JP 4021077, 01-1992
- v.     JP 6027933, 02-1994
- w.     JP 6118923, 04-1994
- x.     JP 62166475, 07-1987
- y.     JP 09220203, 08-1997

- z. EP1 124200A2, 08-2001
- aa. BCEnet Design ([www.hypermart.net/superimpose/](http://www.hypermart.net/superimpose/)).
- bb. BRANDERS.COM ([www.Branders.com](http://www.Branders.com)).
- cc. Blackwell, M. et al., "Performance and accuracy experiments with 3D and 2D image overlay systems", Second Annual International Symposium on Medical Robotics and Computer Assisted Surgery, MRCAS '95 1995, pp. 312-317.
- dd. Evangelest, C.J., et al., "Display architecture to allow rapid updating of a bit-mapped display with automatic regeneration of affected elements", IBM Technical Disclosure Bulletin, vol. 27, No. 1B, Jun. 1984, pp. 847-848.
- ee. Fleming, J.S., "A general software package for the handling of medical images", Journal of Medical Engineering & Technology, vol. 15, No. 4-5, Jul.-Oct. 1991, pp. 162-169.
- ff. Huller, F., et al., "Workstation transfers graphics data processing to the periphery", Elektronik, vol. 32, No. 9, May 6, 1983, pp. 75-79.
- gg. Ichikawa, K., et al., "Processing map and drawing data on MAP VISION", NTT R&D, vol. 41, No. 5, 1992, pp. 609-618.
- hh. Sato, K., "Characteristics of kinoform by LCD and application to display the animated color 3D image", The International Society for Optical Engineering, vol. 2176, 1994, pp. 42-9.
- ii. TOMAX ([www.tomaxusa.com/e-sample/](http://www.tomaxusa.com/e-sample/)).
- jj. Uenohara, M., et al., "Vision-based object registration for real-time overlay", ComputerVision, Virtual Reality and Robotics in Medicine. First International Conference, CVRMed '95. Proceedings 1995, pp. 13-22.
- kk. Uenohara, M., et al., "Vision-based object registration for real-time image overlay", Computers in Biology and Medicine, vol. 25, No. 2, Mar. 1995, pp. 249-260.
- ll. Van Gelder, A., "Doing it with mirrors; low budget stereo graphics", The International Society for Optical Engineering, vol. 2178, 1994, pp. 68-77.
- mm. Vinogradov, K.M., "Some problems arising during the construction of a three-dimensional model of artificial and natural objects by means of computer", Soviet Journal of Optical Technology, vol. 58, NO. 11, Nov. 1991, pp. 746-749.
- nn. The Virtual Family Bragbook ([www.noteworthydesigns.com](http://www.noteworthydesigns.com)).
- oo. Vistech Home Page ([www.mrangel.com](http://www.mrangel.com)).
- pp. Weili, R., "BGI bitmap image overlay processing", Min-i-Micro Syst. (China), vol. 14, No. 6, 1993, pp. 38-41.

2. U.S. Patent Application Serial No. 09/784,395 was filed on February 15, 2001 in the names of Conley Wilson Gilles and Thomas Alan Gingrup, and was subsequently published as US Patent Application Publication No. US 2001/0050690 on December 13, 2001. This application has been examined by the USPTO and an initial Office Action was issued May 7, 2003. A copy of this May 7, 2003 Office Action is enclosed. This Office Action cited the following references as with respect to this application:

- a. Stansfield et al., 5,140,314, 08-1992
- b. Yoda, Kiyoshi, 5,515,268, 05-1996
- c. Hassan et al., 5,689,562, 11-1997
- d. Steinberg, Eran, 5,862,218, 01-1999
- e. Oberg, Larry B., 5,870,771, 02-1999
- f. Halliday et al., 5,880,740, 03-1999
- g. Romano et al., 5,920,685, 07-1999
- h. Hill, 5,970,471, 10-1999
- i. Dries et al., 5,986,670, 11-1999
- j. Hekmatpour et al., 5,982,350, 11-1999
- k. Bornstein, Raanan, 6,144,388, 11-2000
- l. Sivan et al., 6,281,874, 08-2001
- m. Sawano et al., 6,285,381, 09-2001
- n. Miyahara et al., 6,341,350, 01-2002
- o. Knight, Kevin J., 6,344,853, 02-2002
- p. Ramsey et al., 6,353,770, 03-2002
- q. Enomoto, Jun, 6,356,339, 03-2002
- r. Platzker et al., 6,388,654, 05-2002
- s. Ohki et al., 6,392,659, 05-2002

- t. Berger et al., 6,414,693, 07-2002
- u. Akasawa et al., 6,483,540, 11-2002
- v. von Rosen et al., 6,493,677, 12-2002
- w. Cook, David Philip, 6,496,744, 12-2002
- x. Kimura et al., 6,519,351, 02-2003

3. U.S. Patent Application Serial No. 09/784,395 of Giles et al. claims priority of a Provisional Application No. 60/157,173, which was filed on Sept. 30, 1999. A copy of this Provisional Application is enclosed herewith.

4. Enclosed with this Statement, the Applicant further includes copies of two (2) press releases of Macromedia dated April 14, 1998 and August 17, 1998. These two releases related to a variety of software tools. The undersigned is seeking to secure a copy of this software (believed to be available in disc form) and, when received, will file same in the USPTO.

Form PTO/SB/08A is enclosed in duplicate. The undersigned understands that the current practice of the USPTO is not to require the submission of copies of US Patents that are listed on the PTO/SB/08A form and, therefore, has not submitted copies of the listed US Patents. If the Examiner would like to receive copies of the listed US Patents, he is requested to give the undersigned a telephone call to so request same. Copies of the cited Foreign Patents and publications may be found in the file of the above identified parent application of the subject application.

Applicant does not waive any rights to take appropriate action to establish patentability over any of the listed documents should they be applied as references against the claims of the present application.

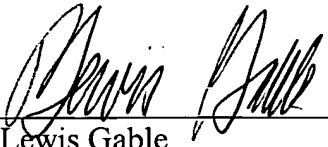
This statement should not be construed as a representation that more material information does not exist or that an exhaustive search of the relevant art has been made.

Consideration of the cited documents and making the same of record in the prosecution of the above-identified application are respectfully requested.

Respectfully submitted,

Cowan, Liebowitz & Latman, P.C.

By:

  
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 PATENT & TRADEMARK OFFICE

**Complete if Known**

<b>Application Number</b>	10/054,164
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<b>First Named Inventor</b>	Kevin J. Knight
<b>Group Art Unit</b>	2141
<b>Examiner Name</b>	Kenneth R. Coulter
<b>Attorney Docket Number</b>	24544.01

(use as many sheets as necessary)

Sheet	1	of	5
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Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		2001/0050690A1		Giles et al.	12-2001	
		2001/0031102A1		Lunetta et al.	10-2001	
		3,987,243		Schwartz	10-1976	
		4,261,012		Maloomian	04-1981	
		4,276,570		Burson, et al.	06-1981	
		4,297,724		Masuda, et al.	10-1981	
		4,482,960		Pryor	11-1984	
		4,486,774		Maloomian	12-1984	
		4,539,585		Spackova, et al.	09-1985	
		4,602,280		Maloomian	07-1986	
		4,617,592		MacDonald	10-1986	
		4,675,725		Parkyn	06-1987	
		4,706,075		Hattori et al.	11-1987	
		4,713,695		Macheboeuf	12-1987	
		4,730,260		Mori, et al.	03-1988	
		4,731,743		Blancato	03-1988	
		4,769,700		Pryor	09-1988	
		4,778,851		Henton et al.	10-1988	
		4,821,118		Lafreniere	04-1989	
		4,868,552		Chang	09-1989	
		5,060,171		Steir, et al.	10-1991	
		5,109,272		Kinoshita et al.	04-1992	
		5,130,801		Yamaguchi	07-1992	
		5,140,314		Stansfield et al.	08-1992	
		5,202,837		Coe et al.	04-1993	
		5,247,610		Oshima, et al.	09-1993	
		5,273,038		Beavin	12-1993	
		5,283,560		Bartlett	02-1994	
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		5,357,601		Kagawa	10-1994	
		5,383,111		Homma et al.	01-1995	
		5,479,597		Fellous	12-1995	
		5,490,080		Jarrige et al.	02-1996	
		5,495,568		Beavin	02-1996	

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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Sheet	2	of	5	Attorney Docket Number	24544.01
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Sheet	3	of	5
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 4 of 5

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Application Number	10/054,164
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Examiner Name	Kenneth R. Coulter
Attorney Docket Number	24544.01

### OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		BCEnet Design ( <a href="http://www.hypermart.net/superimpose/">www.hypermart.net/superimpose/</a> ).	
		BRANDERS.COM ( <a href="http://www.Branders.com">www.Branders.com</a> ).	
		BLACKWELL, M. et al., "Performance and accuracy experiments with 3D and 2D image overlay systems", Second Annual International Symposium on Medical Robotics and Computer Assisted Surgery, MRCAS '95 1995, pp. 312-317.	
		EVANGELEST, C.J., et al., "Display architecture to allow rapid updating of a bit-mapped display with automatic regeneration of affected elements", IBM Technical Disclosure Bulletin, vol. 27, No. 1B, Jun. 1984, pp. 847-848.	
		FLEMING, J.S., "A general software package for the handling of medical images", Journal of Medical Engineering & Technology, vol. 15, No. 4-5, Jul.-Oct. 1991, pp. 162-169.	
		HULLER, F., et al., "Workstation transfers graphics data processing to the periphery", Elektronik, vol. 32, No. 9, May 6, 1983, pp. 75-79.	
		ICHIKAWA, K., et al., "Processing map and drawing data on MAP VISION", NTT R&D, vol. 41, No. 5, 1992, pp. 609-618.	
		SATO, K., "Characteristics of kinoform by LCD and application to display the animated color 3D image", The International Society for Optical Engineering, vol. 2176, 1994, pp. 42-9.	
		TOMAX ( <a href="http://www.tomaxusa.com/e-sample/">www.tomaxusa.com/e-sample/</a> ).	
		UENOHARA, M., et al., "Vision-based object registration for real-time overlay", ComputerVison, Virtual Reality and Robotics in Medicine. First International Conference, CVRMed '95. Proceedings 1995, pp. 13-22.	
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Sheet 5 of 5

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## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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		VAN GELDER, A., "Doing it with mirrors; low budget stereo graphics", The International Society for Optical Engineering, vol. 2178, 1994, pp. 68-77.	
		VINOGRADOV, K.M., "Some problems arising during the construction of a three-dimensional model of artificial and natural objects by means of computer", Soviet Journal of Optical Technology, vol. 58, NO. 11, Nov. 1991, pp. 746-749.	
		The Virtual Family Bragbook ( <a href="http://www.noteworthydesigns.com">www.noteworthydesigns.com</a> ).	
		Vistech Home Page ( <a href="http://www.mrangel.com">www.mrangel.com</a> ).	
		WEILI, R., "BGI bitmap image overlay processing", Min-i-Micro Syst. (China), vol. 14, No. 6, 1993, pp. 38-41.	
		Macromedia Press Release, April 14, 1998	
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